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REMARKS

SEP 27 2006

By the amendments made above, claims 1 and 5-7 are revised and claims 3, 4, 9, and 10 are canceled to place this application in immediate condition for allowance. Currently, claims 1, 2, and 5-8 are before the Examiner for consideration on their merits.

In review, the limitations of claim 4 are essentially incorporated into claim 1, thereby necessitating the cancellation of claim 4. Claim 1 now defines an amorphous substance that is obtained by precipitation from an aqueous solution containing R ions and T ions using a precipitant and a reducing agent. Since claim 3 also included some of the limitations of claim 4, it is also canceled. Claims 5-7 are revised to correct the claim dependency.

In the outstanding Office Action, the Examiner has made a number of prior art rejections as well as an obviousness-type double patenting rejection over related application no. 10/803,963 (hereinafter the '963 application).

Taking into consideration the change to claim 1, Applicants respectfully traverse the prior art rejections as well as the obviousness-type double patenting rejection. The traverse of the rejections is set forth below first by the heading of the applied prior art and then the double patenting rejection.

Yano et al. (the publication of the '963 application)

The Examiner cites the publication corresponding '963 application to allege that claim 1 is anticipated. This rejection is overcome by the incorporation of claim 4 into claim 1.

United States Patent No. 5,503815 to Ishii et al. (Ishii)

Claims 1-5 and 7-10 stand rejected under 35 U.S.C. § 102(b) based on Ishii. This rejection is flawed since the Examiner has incorrectly interpreted the teachings of Ishii with respect to the limitations of the claim regarding the use of a reducing agent to produce the amorphous substance.

In the rejection, the Examiner contends that the nitric acid used in the process of Ishii is a "hydrogen-generating reducing agent". This assertion is incorrect since Ishii does not use nitric acid as a reducing agent to produce the amorphous precursor substance as set forth in claim 1. Instead, Ishii teaches using nitric acid to dissolve oxides, hydroxides, and carbonates of the elements such as Ln, Mn, and Sr, see col. 3, lines 5-20. Following this dissolution step, a particulate ammonium carbonate is added to the obtained solution; thereby obtaining the precipitates of the composite carbonate consisting of relatively uniform aggregated microcrystals, see col. 4, lines 24-25. The composite precipitate forming reaction takes place at or in the vicinity of the surface of the ammonium carbonate.

In order for Ishii to be relevant to claim 1, there must be some teaching or suggestion of using a reducing agent in combination with a precipitant to form the claimed amorphous substance. Ishii lacks any such teaching. As argued above, one of

skill in the art cannot reasonably interpret Ishii's use of nitric acid to read on the claimed method and formation of the amorphous substance.

Ishii is also distinguishable from claim 1, as amended, because there is no teaching of an amorphous precursor substance. In the rejection, the Examiner gives no weight to this limitation, contending that the similarity in the process as claimed and that taught by Ishii means that the precursor product of Ishii is the same. This conclusion is without a factual basis and cannot support the rejection under 35 U.S.C. § 102(b). Moreover, Ishii teaches the formation of microcrystals, and this alone precludes the Examiner from alleging anticipation when the precursor substance is clearly defined as an amorphous one.

Lacking a basis to reject claim 1 under 35 U.S.C. § 102(b), the Examiner can only rely on 35 U.S.C. § 103(a) to further reject the claim using Ishii. However, there is no basis to modify Ishii and arrive at the invention absent the use of Applicants' teachings as a template to make the rejection.

In light of the above, the rejection based on Ishii and 35 U.S.C. § 102(b) is in error and must be withdrawn, and there is no legitimate basis to use Ishii to contend that claim 1 is obvious.

United States Patent No. 6,395,675 to Suga and Ishii

The Examiner rejected original claim 4 based on the combination of Suga and Ishii. In making this rejection, the Examiner admitted that Suga failed to teach a number of limitations, including the use of a reducing agent to make the amorphous

precursor substance. In response to this deficiency, the Examiner contended that it would be obvious to employ the process of Ishii, including the use of the nitric acid as a reducing agent, in the process of Suga.

First, it has already been demonstrated that Ishii neither teaches the manner of forming the amorphous substance nor the amorphous substance itself. Therefore, even if one were motivated to modify Suga with the teachings of Ishii, the method taught by such a combination would still not teach or suggest all of the limitations of claim 1, as amended.

Secondly, the Examiner's reasoning in modifying Suga is flawed since the rejection lacks the requisite motivation to combine Ishii with Suga as set forth in the rejection. In relying on the teachings of Ishii, the Examiner ignores the fact that the method of making the intermediate or precursor substance of Suga is entirely different from that of Ishii. What the Examiner is saying is that one of skill in the art would be motivated to make a wholesale replacement of the process of Suga in order to use the process taught by Ishii. The problem with this approach is that it does not address the all important question of "why" modify the process of Suga. The Examiner's reasoning is conclusory at best; it does not offer any motivation for making such a change to Suga; and it cannot form the basis of a sustainable rejection under 35 U.S.C. § 103(a). Consequently, the rejection based on Suga and Ishii also fails for a lack of motivation.

#### UNEXPECTED RESULTS

The comparative evidence set forth in the specification offers further substantiation of the patentability of claim 1. That is, examples 8-12, which employ the reducing agent as part of the amorphous substance manufacture, show the production of a perovskite having an unexpectedly high specific surface area. This improvement is readily attributed to the use of the reducing agent in the method of making the precursor substance. This result is not in the least bit expected given the teachings of Ishii and Suga, and it weighs in favor of the patentability of claim 1.

OBVIOUSNESS-TYPE DOUBLE PATENTING

In this rejection, the Examiner contended that the claimed method was indistinguishable over that of the '963 application. The '963 application is concerned with the incorporation of a noble metal with the amorphous substance for the heat treating step. The arguments outlined above in conjunction with the amendment to claim 1 clearly demonstrate that the instantly claimed method is not the same as that taught in the '963 application, and that there is a clear line of demarcation between the two applications.

Further, claim 1 is not an obvious over claim 1 of the '963 application. One difference between claim 1 of the '963 application and claim 1, as amended, is the use of a reducing agent in the manufacture of the precursor substance to obtain an improved perovskite. It is clearly not obvious to modify the '963 patent application method with such a step since there is no motivation to do so. Similarly, claim 1 of the instant application claims the use of a precipitant and a reducing agent, and there is no

reason to remove the reducing agent. Therefore, the double patenting rejection must be withdrawn.

SUMMARY

By the amendments made above, the Examiner cannot allege that Ishii establishes a *prima facie* case of anticipation or obviousness. Likewise, the rejection based on Suga and Ishii fails for the same reasons as the rejection based on Ishii alone. Moreover, the combination of Suga and Ishii is improper as lacking the requisite motivation required by 35 U.S.C. § 103(a). Further, the specification sets forth comparative evidence showing unexpected results associated with the processing of claim 1, and these results are further substantiation of the patentability of claim 1.

Lastly, the instant invention is not an obvious variant of the '963 application and the double patenting rejection is in error and must be withdrawn.

Accordingly, the rejections as applied to claim 1 must be withdrawn, and this claim should be passed onto issuance along with its dependent claims 2 and 5-8.

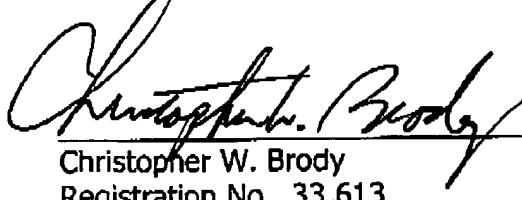
If the Examiner believes that an interview with Applicants' attorney would be helpful in expediting allowance of this application, the Examiner is respectfully requested to telephone the undersigned at 202-835-1753.

Again, reconsideration and allowance of this application is respectfully requested.

The above constitutes a complete response to all issues raised in the Office Action dated June 27, 2006.

Applicants respectfully submit that there is no fee required for this submission, however, please charge any fee deficiency or credit any overpayment to Deposit Account No. 50-1088.

Respectfully submitted,  
CLARK & BRODY



Christopher W. Brody  
Christopher W. Brody  
Registration No. 33,613

**Customer No. 22902**

1090 Vermont Ave. NW, Suite 250  
Washington, DC 20005  
Telephone: 202-835-1111  
Facsimile: 202-835-1755  
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